

7. What is a consistency protocol?

A consistency protocol provides an implementation of a consistency model in that; it manages the ordering of operations according to its particular consistency models with an emphasis on sequential consistency.

8. Discuss any five consistency protocols, showing the Advantages and Disadvantages of each. Also show whether the protocol is a local-write or a remote write (with justifications).

Single Server

Remote – write

This protocol implements sequential consistency by effectively centralizing all data and foregoing data replication. All write operations on a data item are forwarded to the server holding that item's primary copy. Reads are also forwarded to this server.

Advantages

This protocol is easy to implement

Desadvantages

It does not scale well and has a negative impact on performance.

Due to the lack of replication, this protocol does not provide a distributed system with reliability.